

Art Unit: 2831

Part III DETAILED ACTION

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6, 10, 12, 14 - 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Battle (5,463,187).

Battle discloses:

Regarding claims 1 and 10, (a) a plurality of plastic inner ducts 19 contiguous (see figs 1-3, column 5 lines 55-60), co-directionally extending, substantially parallel, in abutting contact with each other (see fig 2), each of said inner ducts having the cross sectional areas sufficient to contain at least one cable (see fig 2); and (b) a plastic outer duct 13 encircling said inner ducts over their entire length to retain them in their contiguous relationship (see fig 2, column 3 lines 1-5, and column 5 lines 40-50); (c) wherein said outer duct has a corrugated tubular

Serial Number: 10/019611

Art Unit: 2831

section including a plurality of contiguous ridges and troughs extending over the entire length (see fig 2); (d) whereby said assembly is so flexible that it can be coiled around transportable reels as well as so strong that it can withstand dirt in a trench (see abstract lines 1-21). With respect to claim 10, said inner ducts and said outer duct are made of polyethylene (see column 3 lines 1-15).

Regarding claim 2, each of said inner ducts is made of polyethylene (see column 3 lines 5-15).

Regarding claims 3-4, each of said inner ducts has a substantially round cross sectional shape (see fig 2), and each of said inner ducts is made separately extruded (see fig 2).

Regarding claim 6, said outer duct has a substantially round cross sectional shape (see fig 2).

Regarding claim 12, each of said inner ducts is made separately extruded (see fig 2).

Regarding claim 14, the interior surfaces of said inner ducts are formed with longitudinal ridges upon which the cable ride as it pulled through them (see fig 2).

Regarding claim 15, the interior surfaces of said inner ducts are formed with spiral ridges upon which the cable ride as it pulled through them (see column 6 lines 1-5).

Regarding claim 16, the wall of said inner ducts are formed with corrugation (see column 6 lines 1-5).

Regarding claim 17, said outer duct has a substantially round cross sectional shape (see fig 2).

Serial Number: 10/019611

Art Unit: 2831

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5, 7-9, 11, 13, 18-20 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Battle (5,463,187).

Battle discloses:

Regarding claims 5 and 13, the assembly of Battle disclose all the features of the claimed invention as shown above, but fails to disclose said inner ducts is connected by flexible connecting webs. it would have been an obvious matter of design choice to use said inner ducts is connected by flexible connecting webs , since applicant has not disclosed that said inner ducts is connected by flexible connecting webs solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with if designed with said inner ducts of Battle.

Serial Number: 10/019611

Art Unit: 2831

Regarding claims 7-9, 18-20, the assembly of Battle disclose all the features of the claimed invention as shown above, but fails to disclose said outer duct has a substantially ellipsoid cross sectional shape (for claims 7 and 18), said outer duct has a substantially triangular cross sectional shape with round corners (for claims 8 and 19), and said outer duct has a substantially quadrangular cross sectional shape with round corners (for claims 9 and 20), and applicant doesn't state a particular problem is solved by the above mentioned shape. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the assembly of Battle with said outer duct has a substantially ellipsoid cross sectional shape (for claims 7 and 18), said outer duct has a substantially triangular cross sectional shape with round corners (for claims 8 and 19), and said outer duct has a substantially quadrangular cross sectional shape with round corners (for claims 9 and 20), since more than a mere change of form is necessary for patentability. In re Span-Deck Inc. V. Fab-con, Inc. (CA 8, 1982) 215 USPQ 835.

Regarding claim 11, the assembly of Battle disclose all the features of the claimed invention as shown above, but fails to disclose said inner ducts and said outer duct are welded together at the contiguous portions where the troughs of said outer duct and the outer peripheral surfaces of said inner ducts are contacted. It would have been an obvious matter of design choice to use said inner ducts and said outer duct are welded together at the contiguous portions where the troughs of said outer duct and the outer peripheral surfaces of said inner ducts are contacted, since applicant has not disclosed that said inner ducts and said outer duct are welded together at the contiguous portions where the troughs of said outer duct and

Art Unit: 2831

the outer peripheral surfaces of said inner ducts are contacted solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with if designed with said inner ducts and outer duct of Battle.

Other prior art cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hauff, and Gatfieldchannel duct similar to applicant's claimed invention.

Contact information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhiru Patel whose telephone number is (703) 308 -3748. The examiner can normally be reached on Mondays- Thursdays from 6:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard be reached at 703-308-3682. The fax number for this Group is 703-305-3431. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Dhiru Patel
Patent Examiner
Group Art Unit 2831
September 5, 2002

Dhiru Patel